

Hot issues

Lead in Drinking Water Request for Applications

The National Priorities: Transdisciplinary Research into Detecting and Controlling Lead in Drinking Water Request for Applications (RFA) is anticipated to open next week. This RFA seeks applications supporting research to (1) identify communities that are at a high risk of experiencing the adverse health effects of lead in drinking water; (2) identify opportunities to mitigate these risks; and (3) conduct educational and outreach efforts so that water system managers and the general public are aware of these risks and opportunities. The RFA will be open for 45 days.

ORD Provides Technical Support to Region 4 and North Carolina in GenX Analyses

ORD is providing technical support to Region 4 and the North Carolina Department of Environmental Quality (NCDEQ) in relation to GenX, a type of polyfluoroalkyl substance (PFAS) used as a replacement for PFOA and found in source and finished drinking water in Wilmington, NC. The finding of GenX was reported in an ORD journal article titled "[[HYPERLINK](https://pubs.acs.org/doi/abs/10.1021/acs.estlett.6b00398)

"<https://pubs.acs.org/doi/abs/10.1021/acs.estlett.6b00398>"]" published in November 2016.

Researchers were able to identify and measure GenX in drinking water along with other PFCs. The average concentration of GenX in finished drinking water was found to be 631 nanograms per liter. PFOS and PFOA were also measured and found to be below EPA's health advisory level of 70 nanograms per liter. ORD researchers are working to identify and quantify additional PFAS found within samples to inform exposure, risk, and public health priorities.

New Federal Reference Methods and Federal Equivalent Methods Approved

A core element of ORD's Emissions and Measurements program is designating Federal Reference Methods (FRMs) and Federal Equivalent Methods (FEMs) for measuring criteria pollutants in ambient air. These measurements are used to inform attainment/nonattainment decisions and for a wide range of analyses. A new FRM for carbon monoxide (CO) and one new FEM for nitrogen dioxide (NO₂) were recently designated by ORD. Designation of these reference and equivalent methods is intended to assist the States in establishing and operating their air quality surveillance systems.

Upcoming public events

Region 8 Regional Tribal Operations Committee/EPA Tribal Science Council Joint Meeting

Rapid City, SD, June 20-22. ORD is participating in this meeting, which will include a panel discussion on lead to promote the exchange of scientific information on the topic. This will enhance communications between EPA and Tribal Science Council Tribal caucus representatives on the priority issue of lead and the impact of lead deposition on communities, including Native American communities.

External peer review for report on modeling drinking water lead benchmark levels

On June 27 and 28, OW is hosting the [[HYPERLINK](https://projects.erg.com/conferences/peerreview/register-lead-drinkwater.htm)

"<https://projects.erg.com/conferences/peerreview/register-lead-drinkwater.htm>"] in Washington, D.C. To review the three EPA modeling approaches proposed in the document and discuss the expert's comments on the charge questions. EPA is seeking comments on the scientific aspects of these potential modeling approaches to associate lead in drinking water with blood lead levels, for informing future consideration of a health-based benchmark for the Lead and Copper Rule revisions.

World Health Organization Meeting on Antibiotic Resistance and the Environment

July 5-6 in the Netherlands, ORD will participate in the World Health Organization Meeting on Antibiotic Resistance and the Environment during which the committee will develop an action plan identifying research priorities. ORD will offer expertise in antibiotic resistance in wastewaters, wastewater

treatment, and U.S. wastewater treatment regulations. This planning committee brings together researchers and scientists from around the world to discuss topics concerning antibiotic resistance in various environmental matrices.

Unilever

June 24-29, ORD scientists will meet with Unilever's Safety and Environmental Assurance Center staff to discuss the cooperative research project underway to evaluate new approaches for assessing the risk of chemicals. EPA and Unilever are working under a Collaborative Research and Development Agreement on a series of case studies based on five chemicals of mutual interest. If successful, research from this collaboration will result in better ways to evaluate the potential health effects of new ingredients and chemicals we currently know little about. These methods could be used by both industry and governmental agencies to reduce the costs associated with safety testing and ultimately address the thousands of untested chemicals in our environment.

Perchlorate

On June 29, ORD will participate in a briefing for OMB and other interested federal agencies on OW's upcoming peer review of their draft *Proposed Approaches to Inform the Derivation of a Maximum Contaminant Level Goal (MCLG) for Perchlorate in Drinking Water*. ORD scientists have contributed to the development and review of modeling to inform the MCLG and review of OW's subsequent approaches to derive an MCLG. OW is preparing for a contractor-led peer review with public comment in summer 2017.

Last week Highlights

Clean Air Scientific Advisory Committee Teleconference

On June 20, the Clean Air Scientific Advisory Committee (CASAC) held a teleconference to discuss the CASAC sulfur oxides (SOx) Panel's draft letter summarizing their review of the 2nd draft Integrated Science Assessment (ISA) for Oxides of Sulfur – Health Criteria. This meeting included the statutory CASAC members. While there are 80 pages of comments to evaluate and respond to, the NCEA SOx ISA team is well-positioned to complete the final SOx ISA by the court-ordered deadline in early December.

Rapid Tests Transform Chemical Safety Calls

A Practitioner Insights article by ORD's Rusty Thomas and John Wambaugh was recently published in Bloomberg BNA's Daily Environmental Report. The article, entitled "Rapid Tests Transform Chemical Safety Calls", describes the challenge of making safety-related decisions on thousands of chemicals that may lack hazard and exposure data. The article provides information on how EPA is developing faster and more economical approaches to predict potential health effects of thousands of chemicals, and how EPA is providing access to this data through online dashboards to support regulatory and policy decisions. The article summarizes EPA's progress in assessing the chemistry, hazard, dose response, and exposure data for chemicals.

ORD Research Lauded by Nisqually Tribe Land Trust Newsletter

A recent newsletter article cited ORD research on VELMA (Visualizing Ecosystem Land Management Assessments) that was used to help the Nisqually Community Forest plan for timber-thinning projects. The [[HYPERLINK "http://nisquallylandtrust.org/nisqually-wp/wp-content/uploads/2017/05/newsletter-1.pdf"](http://nisquallylandtrust.org/nisqually-wp/wp-content/uploads/2017/05/newsletter-1.pdf)] reads, in part: *"Guided by sophisticated new modeling from the Environmental Protection Agency's Western Ecology Division in Corvallis, combined with modeling used by the Nisqually Tribe for salmon recovery, the community forest's management team will selectively thin the property's timber stands to encourage old-growth forest characteristics and*

increase stream flow during the fall spawning season.” VELMA predicts the effectiveness of alternative green infrastructure scenarios for protecting water quality, and also estimates potential ecosystem service co-benefits and trade-offs.

Superfund

During this reporting period, Region 4 began working with ORD’s Engineering Technical Support Center and Groundwater Technical Support Center to review a Feasibility Study for the [[HYPERLINK "https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0402724"](https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0402724)] near Yadkinville, NC. ORD’s review will ensure that all potential remedial alternatives identified by the potentially responsible party are being considered so that most cost-effective and health-protective option can be found.

ORD State Coordination Team Meeting

On June 19, ORD hosted the State Coordination Team monthly teleconference to discuss efforts underway to develop additional stories on how ORD’s research and technical assistance are supporting the states, as well as plans for the Environmental Research Institute of the States (ERIS) Board-EPA Joint Meeting to be held on July 11-12 in Oklahoma.

Small Business Innovation Research (SBIR)

The former EPA SBIR-funded company, [[HYPERLINK "http://www.pitmoss.com/"](http://www.pitmoss.com/)] – which has developed a sustainable potting soil made of recycled paper reclaimed from landfills that serves as an alternative to peat moss – is experiencing rapid growth in their consumer base, revenue, and social media presence. PitMoss products are attracting interest from across the country, and they recently had their first truckload sale to Colorado along with the first pallet sale to Washington State, while growers in Northern California have reached out about ordering a truckload as well. An ever-expanding consumer base typically coincides with increasing profits, and PitMoss has already doubled last year’s revenue (they hope to triple or quadruple it by the end of the year), after also doubling their revenue from the previous year. To learn more, visit their website, search PitMoss across various social media platforms, or view their [[HYPERLINK "https://www.youtube.com/channel/UCWnLUOfRCIrk7VLNsbbtXew"](https://www.youtube.com/channel/UCWnLUOfRCIrk7VLNsbbtXew)] .